



Can one chipset deliver advanced technology and I/O flexibility for both workstations and servers?

Yes. The Intel® E7505 chipset takes full advantage of the latest Intel® Xeon™ processors to deliver performance-packed workstation and server platforms!

Advanced computer users in fields such as digital content creation, mechanical design and analysis, are placing increasingly higher demands on dual-processor systems. The E7505 chipset, which is designed to take advantage of the fastest Intel® Xeon™ processor with both the 533 MHz system bus and Hyper-Threading Technology, also delivers advancements to key platform subsystems:

- Dual-channel DDR266 memory
- AGP 8X graphics
- Advanced I/O connectivity

The E7505 chipset continues the tradition of reliability and manageability users have come to expect in enterprise-class chipsets from Intel.

New Features Deliver Greater Performance

Next-Generation Processors: The E7505 chipset is optimized for the Intel Xeon processor with 533 MHz system bus and Hyper-Threading Technology. The chipset accesses one or two processors across a 4.3 GB/s system bus, delivering faster system responsiveness for the most compute-intensive tasks. Hyper-Threading Technology allows each processor to execute instructions on multiple software threads. Hyper-Threading Technology delivers performance gains to common workstation and server applications and in multitasking environments.

High-Performance Memory

Platforms taking advantage of higher Intel Xeon processor system bus speeds benefit from balanced, high-bandwidth, memory subsystems. The E7505 chipset provides two DDR266 memory channels for a total of 4.3 GB/s of bandwidth, optimized to match the increased system bus bandwidth. This balance between system bus and memory bandwidth helps alleviate performance bottlenecks for intensive applications that utilize expanded memory access for priority system, graphic and network transactions.

Next-Generation AGP 8X Graphics

The graphics subsystem of the E7505 chipset delivers an enhanced implementation of advanced graphics features. The AGP 8X graphics bus on the E7505 chipset is twice as fast as previous AGP technology, providing 2.1 GB/s of graphics bandwidth. Additionally, E7505 chipset-based platforms are designed to support enhanced AGP Pro50* graphics cards. The E7505 chipset incorporates the AGP 8X graphics interface directly into the chipset's memory controller hub. This chipset feature eliminates any possible latencies introduced by a separate graphics controller. This chipset is also backwards-compatible with the AGP 2.0 specification and corresponding AGP 4X cards. Overall, the E7505 chipset enables a comprehensive visualization platform with the very latest in graphics technology.



The Intel®
E7505 Chipset



Advanced I/O Connectivity

The E7505 chipset provides greater than 1.0 GB/s of I/O bandwidth through the Intel® 82870P2 64-bit PCI/PCI-X controller hub 2.0. This interface provides two independent 64-bit PCI/PCI-X segments that are compatible with high-speed SCSI devices or a variety of custom applications for industries such as computer-aided design or video production. Additionally, these enterprise-class I/O segments are ideal for use with Intel compatible controllers which provide network connectivity for past, present, and future LAN environments. The E7505 chipset also includes six ports of integrated Hi-Speed USB 2.0. The USB 2.0 interface provides up to 40 times greater bandwidth than the original USB 1.1 specification and delivers performance gains when transferring large data sets to portable devices. Each of these interconnects are supported within the platform by the Intel® Accelerated Hub Architecture. This architecture is optimized to quickly move data around the platform and delivers the reliability proven by years of Intel® workstation and server experience.

Reliability and Manageability

The E7505 chipset incorporates enhanced system reliability features. In addition to error correction on the system bus, this chipset also supports Intel® x4 Single Device Data Correction (x4 SDDC)**, error correction code memory, and single-channel operation.

Parity checking may also be performed on Intel® Hub Architecture interconnects between chipset components. This means that data integrity is protected on all key interfaces of the E7505 chipset.

The E7505 chipset, with integrated LAN controller, enables Alert on LAN* capability. Alert on LAN is a feature that broadcasts an alert in the case of a software failure or system intrusion. This feature can help reduce system downtime and improve remote problem resolution for IT groups, as the alert occurs even when the operating system is not present, the CPU is removed, or the system is turned off.

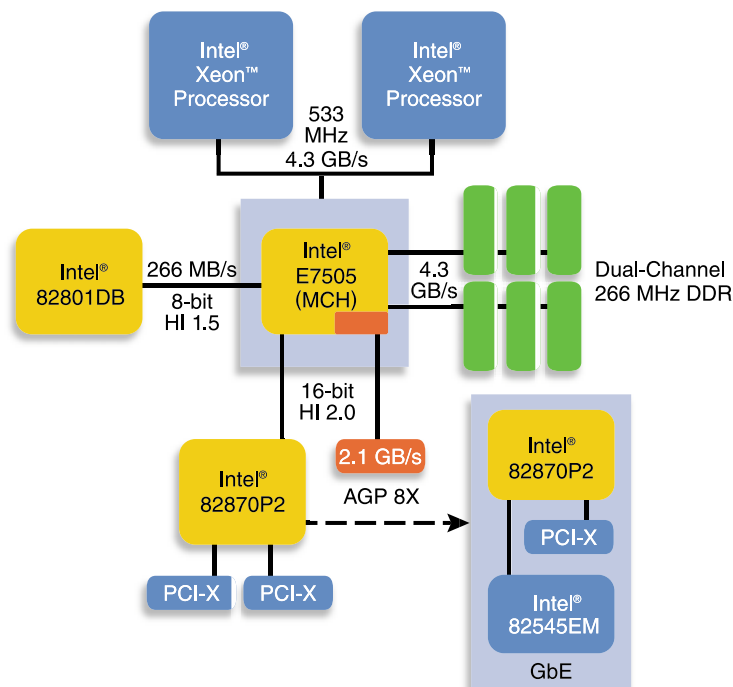


Figure 1.0 Intel® Xeon® Processor with 533 MHz system bus and the Intel® E7505 Chipset Block Diagram

Intel Access

Products Web Site	http://www.intel.com/products/server
Intel® Chipsets Home Page	http://www.intel.com/products/server/chipsets
Intel® Xeon™ Processor with 533 MHz System Bus	http://www.intel.com/design/xeon
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**In a x4 DDR memory device, the Intel® x4 Single Device Data Correction (x4 SDDC), provides error detection and correction for 1, 2, 3, or 4 data bits within that single device and provides error detection, up to 8 data bits, within two devices.

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